VT Agency of Transportation

AASHTO Technical Committee on Environmental Design Fall Meeting

October 2, 2007

Today's Presentation

- VT State Standards
- Project Development Process
- Project Prioritization
- Road to Affordability

VSS History

- Vermont State Standards for Construction, Reconstruction and Rehabilitation of Roadways and Bridges
- Developed 1994 – 1996 by committee: VTrans, ANR, DHP, RPC, Vermont Council on the Arts, Preservation Trust, FHWA, private citizens
- Implemented as legislative rules in 1997
- Minority report written 1997 by committee engineers

VSS Purpose

1. To provide clear technical direction to the designers of transportation projects in Vermont

2. To achieve roadway and bridge designs which provide access, mobility and safety for users, and which are also sensitive to the social and environmental context of Vermont

VSS Balance

- The physical attributes of roadways which are important for user safety
- The transportation planning policies guiding the region and community
- The need for access to, and mobility along a roadway
- The presence of historic sites and districts
- The presence of natural resources & environmental factors
- The social context of the communities within which the facility exists
- The economic development needs of the community, region & state

VSS Implementation

- Apply to all classifications of highways (freeways defer to AASHTO for geometric standards)
- Sight Distance, lane width, shoulder width, clear zone, grades, bicycle and pedestrian consideration
- Many values/charts closely aligned to AASHTO values
- Sets requirement to follow design exception policy as applicable

VSS Exceptions

- "Design Speeds as much as 10 miles per hour lower than legal speeds may be used without a formal design exception, provided appropriate warnings are provided."

"Clear Zones as narrow as 10 feet may be used, without design exception, where necessary to avoid or minimize disturbance of significant historic, archeological, scenic natural or other resources."

VSS Tools

- Special Design Guidelines – intended to assist designers in avoiding, minimizing or mitigating impacts on resources
- Common Tools – provide designers a list of potential decisions that can be used to minimize impacts
- Level of Improvement Policy

Project Development Process

- Adopted 1998 for all projects
- Project Selection
- Project Definition Phase
- Project Design Phase
- Construction

PD Process - Collaboration

- Various VTrans Sections
- Regulatory Agencies
- Regional Planning Commissions
- Selectboards/Town Officials
- Local Community Groups
- Property Owners
- General Public
- FHWA

Project Definition – Purpose & Need

Local Concerns Meeting Held to gather comments from the public, introduce the project area and initiate a working relationship.

Purpose & Need Statement This document sets the framework for the project. It clearly states the problems within the project area and the goal for any improvements.

Project Definition – Scoping

Alternative Evaluation

Alternatives that meet the purpose and need of the project are identified and evaluated. All environmental resources are identified, plotted and potential impacts evaluated at this stage.

Alternative Presentation Meeting

Presentation and acceptance of a selected alternative

Scoping Report

Comprehensive document of purpose and need, alternative analysis and recommendation of alternative

PD Process - Public Involvement

- Local Concerns Meeting
- Alternatives Presentation Meeting
- 502 Hearing
- Property Owner Visits
- Act 250 Hearings (as required)
- Informational Meetings (as required)
- Necessity Hearing
- Compensation Hearing
- Local Board Meetings
- Direct Communication with VTrans

Project Prioritization

- Prioritization systems created for all major programs in 2005
- Created with input from legislative body
- Some systems based on asset management principles, some based on need to prioritize backlog of existing projects
- Continual evaluation of categories and weighting criteria

Project Prioritization – Categories

- Highway System/Condition of facility
- Cost effectiveness
- Project Momentum
- Regional Planning Commission Priority

Reality of Affordability

- Vermont has an aging transportation infrastructure that demands greater and more costly attention than in the past.
- Bridge, culvert and road repair are competing with new roadway construction projects for limited funds.
- To maintain future budgets that can successfully include important new roadway projects, Vermont must first step back and preserve its existing assets so that they do not deteriorate to the point that they require major reconstruction and become a financial drain on the entire system.

Road to Affordability - Challenges

- Maintain the transportation network within already identified revenue sources.

- Upward pressures:

  - Major projects
  - Deferred Maintenance
  - Cost increases outpace revenue increases
  - Unprecedented demands on Public Transit

Road to Affordability

Realignment of Priorities

- Primary investment in traveler safety and the preservation of existing infrastructure.
- Optimize resource performance by focusing attention on a practical number of large projects.
- Set realistic timetables for large projects and new roadway segments and balance funding within the Roadway Program to reflect priority on system preservation.

Road to Affordability

Rethink Project Focus

- Just in time delivery of Design, ROW, & Permitting
- Back to Basics–Where design status allows, develop project scopes that limit the addition of project amenities not related to preservation and environmental protection. (Example: under-grounding of utilities, streetscapes)
- Innovative Finance-Any proposed new roadway-segment project not presently in the D&E portion of the capital program will require an innovative financing approach acceptable to the Agency prior to being considered for inclusion in the capital program.

Context Sensitive Solutions

Context sensitive solutions (CSS)— also known as context sensitive design (CSD) – is an approach to transportation design that considers the total context within which a transportation improvement project will exist. It is a collaborative, interdisciplinary approach that involves all stakeholders to develop a transportation facility that fits its physical setting and preserves scenic, aesthetic, historic, and environmental resources, while maintaining safety and mobility.

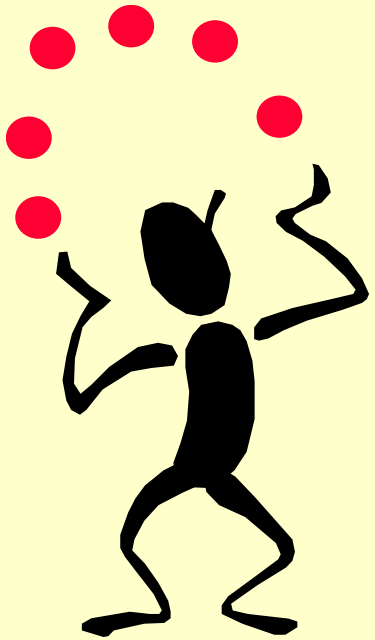
Context Sensitive Solutions

Characteristics of the Process Contributing to Excellence

- ***Communication** with all stakeholders is open, honest, early, and continuous.*
- *A **multidisciplinary team** is established early, with disciplines based on the needs of the specific project, and with the **inclusion of the public**.*
- *A full range of stakeholders is involved with transportation officials in the **scoping phase**. The purposes of the project are clearly defined, and **consensus** on the scope is forged before proceeding.*
- *The highway development process is tailored to meet the circumstances. This process should examine **multiple alternatives** that will result in a consensus of approach methods.*
- *A **commitment** to the process from top agency officials and local leaders is secured.*
- *The **public involvement process, which includes informal meetings, is tailored to the project.***
- *The **landscape, the community, and valued resources are understood** before engineering design is started.*
- *A full range of **tools for communication** about project alternatives is used (e.g., visualization).*

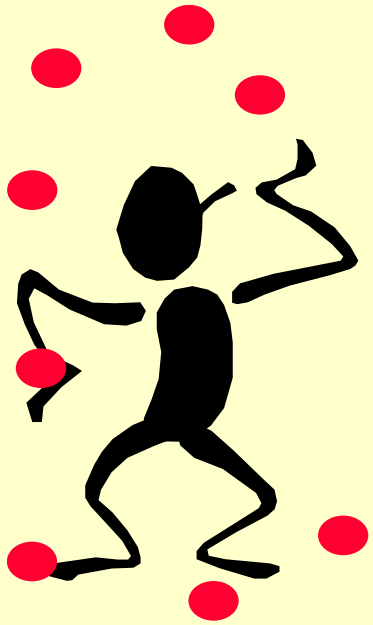
Context Sensitive Solutions

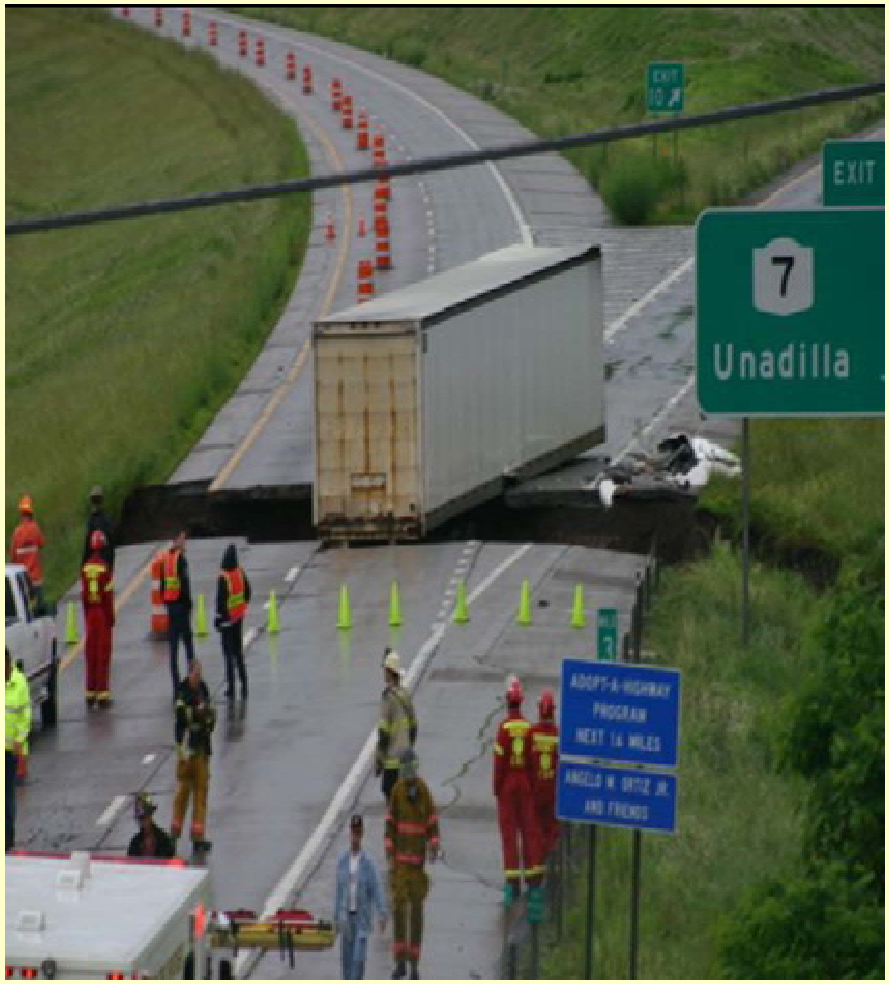
So what is the Vermont Agency of Transportation doing to meet the intent of Context Sensitive Solutions?



Balancing

Demands




EXIT
7
Unadilla

Questions ???

Kevin S. Marshia, P.E.

Vermont Agency of Transportation

Roadway, Traffic & Safety Program Manager

Email: kevin.marshia@state.vt.us

Phone: 802-828-2664